Amendments to the Claims:

Claims 1-28 **(Cancelled)**

29. **(New)** A decoding method for decoding a block while switching between frame decoding and field decoding adaptively on a block-by-block basis, said method comprising:

obtaining, from a bit stream, a sequence of commands each for assigning a reference index for frame decoding to a reference frame;

specifying a reference frame which is referred to when a block is decoded, using the reference index extracted from a coded block information area and a reference index for frame decoding assigned by a command of the sequence, in the case where frame decoding is performed on the block; and

specifying a reference field which is referred to when the block is decoded, using a reference index extracted from the coded block information area and a reference index for field decoding which is generated using the reference index for frame decoding, in the case where field decoding is performed on the block.

30. **(New)** The decoding method according to Claim 29,

wherein said specifying of the reference field includes:

specifying, as the reference field, a field having a parity which is the same as a parity of a field including the block to be decoded, out of two fields that make up the reference frame specified by the reference index for frame decoding, in the case where a value of the extracted reference index is double a value of the reference index for frame decoding; and

specifying, as the reference field, a field having a parity which is different from the parity of a field including the block to be decoded, out of the two fields that make up the reference frame specified by the reference index for frame decoding, in the case where the value of the

extracted reference index is double the value of the reference index for frame decoding, plus one.

31. **(New)** The decoding method according to Claim 30, further comprising:

obtaining, from the bit stream, information indicating a maximum number of reference indices for frame decoding; and

determining a maximum number of reference indices for field decoding to be double a value of the maximum number of reference indices for frame decoding,

wherein said specifying of the reference field includes extracting the reference index within a range of the determined maximum number of reference indices for field decoding.

32. **(New)** A data storage medium on which a program for decoding a coded block signal is recorded,

wherein the program causes a computer to execute the processing by the decoding method according to Claim 31.

33. **(New)** A data storage medium on which a program for decoding a coded block signal is recorded,

wherein the program causes a computer to execute the processing by the decoding method according to Claim 30.

34. **(New)** A data storage medium on which a program for decoding a coded block signal is recorded,

wherein the program causes a computer to execute the processing by the decoding method according to Claim 29.

35. **(New)** A decoding apparatus which decodes a block while switching between frame decoding and field decoding adaptively on a block-by-block basis, said apparatus comprising:

a command obtainment unit operable to obtain, from a bit stream, a sequence of commands each for assigning a reference index for frame decoding to a reference frame; and

a reference frame/field specification unit operable to

(i) specify a reference frame which is referred to when a block is decoded, using the reference index extracted from a coded block information area and a reference index for frame decoding assigned by a command of the sequence, in the case where frame decoding is performed on the block, and

(ii) specify a reference field which is referred to when the block is decoded, using a reference index extracted from the coded block information area and a reference index for field decoding which is generated using the reference index for frame decoding, in the case where field decoding is performed on the block.

36. **(New)** A coding method for coding a block while switching between frame coding and field coding adaptively on a block-by-block basis, said method comprising:

generating a sequence of commands each for assigning a reference index for frame coding to a reference frame;

specifying a reference frame which is referred to when a block is coded, using a reference index for frame coding assigned by a command of the sequence; and

coding the reference index for frame coding which is used for specifying the reference frame.

37. **(New)** A coding method for coding a block while switching between frame coding and field coding adaptively on a block-by-block basis, said method comprising:

generating a sequence of commands each for assigning a reference index for frame coding to a reference frame;

specifying a reference frame which is referred to when a block is coded, using the reference index for frame coding assigned by a command of the sequence, in the case where frame coding is performed on the block;

specifying a reference field which is referred to when the block is coded, using the reference index for field coding which is generated using the reference index for frame coding, in the case where field coding is performed on the block;

coding the reference index for frame coding which is used for specifying the reference frame in the case where frame coding is performed on the block; and

coding the reference index for field coding which is used for specifying the reference field in the case where field coding is performed on the block.

38. **(New)** The coding method according to Claim 37,

wherein said specifying of the reference field includes:

specifying, as the reference index for field coding, a doubled value of a value of the reference index for frame coding which is used for specifying a reference frame including the reference field, in the case where the reference field has a same parity as a parity of a field including the block to be coded; and

specifying, as the reference index for field coding, a value obtained by adding one to the doubled value of the value of the reference index for frame coding which is used for specifying the reference frame including the reference field, in the case where the reference field has a different parity from the parity of the field including the block to be coded.

39. **(New)** The coding method according to Claim 38, further comprising:

coding information indicating a maximum number of reference indices for frame coding; and

determining a maximum number of reference indices for field coding to be double a value of the maximum number of reference indices for frame coding,

wherein said specifying of the reference field for field coding includes determining the reference index for field coding so that the number of specified reference fields is not greater than the determined maximum number of reference indices for field coding.

40. **(New)** A data storage medium on which a program for coding a image signal is recorded,

wherein the program causes a computer to execute the coding by the moving picture coding method according to Claim 39.

41. **(New)** A data storage medium on which a program for coding a image signal is recorded,

wherein the program causes a computer to execute the coding by the moving picture coding method according to Claim 38.

42. **(New)** A data storage medium on which a program for coding a image signal is recorded,

wherein the program causes a computer to execute the coding by the moving picture coding method according to Claim 37.

43. **(New)** A coding apparatus which codes a block while switching between frame coding and field coding adaptively on a block-by-block basis, said apparatus comprising:

a command generation unit operable to generate a sequence of commands each for assigning a reference index for frame coding to a reference frame;

a reference frame/field specification unit operable to

(i) specify a reference frame which is referred to when a block is coded, using a reference index for frame coding assigned by a command of the sequence,

in the case where frame coding is performed on the block, and

(ii) specify a reference field which is referred to when the block is coded, using a reference index for field coding which is generated using a reference index for frame coding, in the case where field coding is performed on the block; and

a reference index coding unit operable to

(iii) code the reference index for frame coding which is used for specifying the reference frame in the case where frame coding is performed on the block, and

(iv) code the reference index for field coding which is used for specifying the reference field in the case where field coding is performed on the block.